



CITY OF FORT LAUDERDALE

DRAFT
MEETING MINUTES
CITY OF FORT LAUDERDALE
INFRASTRUCTURE TASK FORCE COMMITTEE
FORT LAUDERDALE CITY HALL
100 NORTH ANDREWS AVENUE
FORT LAUDERDALE, FLORIDA
MONDAY, JANUARY 6, 2020 – 2:00 P.M. TO 5:00 P.M.

January-December 2020		Attendance	
Marilyn Mammano, Chair	P	1	0
Gerald Angeli	P	1	0
Michael Marshall	P	1	0
Norm Ostrau	P	1	0
Peter Partington	A	0	1
Jacquelyn Scott	P	1	0
Fred Stresau	P	1	0
Roosevelt Walters	P	1	0
Ralph Zeltman	P	1	0

As of this date, there are 9 appointed members to the Board, which means 5 would constitute a quorum.

Staff

- Ben Sorensen, Fort Lauderdale City Commissioner
- Rob Hernandez, Deputy City Manager
- Aneisha Daniel, Deputy Director of Public Works
- Dr. Nancy Gassman, Assistant Director of Public Works – Sustainability
- Talal Abi-Karam, Assistant Director of Public Works -- Utilities
- Omar Castellon, Chief Engineer
- Jodi Hart, Chief Procurement Officer
- Todd Hiteshow, Environmental Services Manager
- Pauline Ricketts, Administrative Assistant
- Jamie Opperlee, Recording Secretary, Prototype Inc.

Communication to the City Commission

None.

1. Call to Order

- **Roll Call**

Chair Mammano called the meeting to order at 2:01 p.m.

2. Approval of Agenda

Motion made by Ms. Scott, seconded by Mr. Walters, to approve. In a voice vote, the **motion** passed unanimously.

3. Approval of Previous Meeting Minutes

- **November 4, 2019**
- **December 2, 2019**

Motion made by Mr. Walters, seconded by Ms. Scott, to approve with or without corrections.

Ms. Scott advised that cumulative attendance as reflected in the November and December 2019 minutes was not correct. It was determined that attendance would be reviewed and addressed.

Mr. Zeltman also provided changes to his statements in p.6, paragraph 4 of the November 2019 minutes regarding the potential relocation of the Fiveash Water Treatment Plant.

In a voice vote, the **motion** passed unanimously [as corrected].

The Committee approved the December 2, 2019 minutes by consensus [as corrected].

4. General Discussion and Comments by Committee Members

Chair Mammano commented that several communities and individuals throughout the City have been under considerable stress in relation to recent sewer breaks, including affected neighborhoods, elected officials, and City Staff.

Mr. Walters observed that a recent article in the *Sun-Sentinel* quoted the Mayor as saying these sewer issues would take priority over “other programs” at present, and asked for clarification of the other programs to which the Mayor had referred. Deputy City Manager Rob Hernandez stated that the Mayor and City Commissioners are reviewing projects within the City’s Capital Improvement Program (CIP) for re-prioritization in order to address larger programs first, such as redundancy of water and sewage lines.

Mr. Walters pointed out that the City needs to be informed of which projects will be delayed and which will be addressed in the near term. He emphasized the importance of transparency regarding the funds moved from some projects to others in order to take care of sewer problems, as well as how other projects would be re-ordered. Mr. Hernandez cited the example of a capital improvement project that would re-line the existing sewage transmission line: this would require placing a redundant transmission line into service. The City has made this redundant line its top priority for funding, which means the re-lining project will be delayed until the redundant line is complete.

Chair Mammano recalled that she had previously requested City Staff provide the Committee members with a description of staffing levels in the Utilities Department. Mr. Zeltman pointed out that Broward County uses a different departmental structure than Fort Lauderdale, with a Public Works Department that includes both a Utilities and an Engineering Division. He felt the City should consider restructuring its organizational chart so it is similar to the County structure, in which the Engineering Division addresses projects such as roads, storm drains, and seawalls while Utilities Staff focuses on water, sewer, and other utility needs.

Mr. Walters pointed out that the staffing information provided does not answer the question of whether the City has sufficient staff to operate efficiently. Chair Mammano recalled that this has been discussed by the Committee in the past; however, it has become a higher priority to consider due to recent sewer and water crises. She felt this could be a productive area to discuss further if the Committee does not sunset in the near future. It was clarified that there have been two national searches, one for a new Public Works Director and one for a Director of Engineering.

Mr. Hernandez explained that the plan had been for the City to issue \$200 million in bonds, backed by a new stormwater rate structure. When this was presented to the City Commission, the Commission requested that consultant Stantec brief the Council of Fort Lauderdale Civic Associations on the proposed rate structure before it is brought back to the Commission for formal approval. Until this process is complete, the City Manager will work within the existing rate structure and funding capacity to pursue approximately \$70 million in projects in the Edgewood and River Oaks neighborhoods, which are significantly affected by flooding. When a new rate structure is implemented, there will be additional capacity to bond the remaining funds and address the remaining affected neighborhoods.

5. Old Business

A. Communication to the City Commission Regarding Sunset of the ITF

Chair Mammano recalled that the Committee had sent a communication to the City Commission in April 2019 to request that the Commission consider either re-establishing this Committee or creating a different advisory entity to focus on infrastructure after the March 2020 sunset date. Another communication to this effect was sent to the Commission in October 2019.

City Commissioner Ben Sorensen addressed the Committee, stating that there is much more work to be done regarding infrastructure, which is his top priority. He concluded that he was in favor of extending the Committee's tenure past March 2020, as well as possibly modifying their scope so they may report regularly to the City Commission. He planned to request these changes at the January 7, 2020 City Commission Conference Agenda meeting.

Mr. Ostrau advised that the Committee's structure should be modified to reflect greater independence, fixed term limits, and a more diverse base in order to provide greater input. He did not believe continuing the Committee in its present form would be sufficient to meet the City's needs. Commissioner Sorensen encouraged the Committee members to attend the January 7 meeting if they wished to have input before the full Commission.

6. New Business

A. Consent Order Update – Hazen & Sawyer

Patricia Carney, Program Manager with consultant Hazen and Sawyer, provided a presentation on the City's consent order regarding the repair and maintenance of wastewater systems. It was noted that Fort Lauderdale's Senior Project Manager for this consent order is no longer with the City, and this position has not yet been filled.

The consent order has 51 milestones to be completed within a nine-year period, 22 of which are complete at this time. These milestones are grouped into separate efforts, including:

- Fast-track force main repair
- Capacity modeling of the sewer system
- Geographic information system (GIS) mapping of the system
- Force main condition assessment
- Non-invasive soil testing

Ms. Carney explained that the City has 111 miles of force mains, many of which have experienced several breaks and are considered to be failing due to their age and materials. The mains in significant disrepair have not been tested, as the City is already aware of their condition. Relatively new mains were also not tested, as they are presumed to be in good repair. This limited the scope of work to those mains whose condition is not fully known.

One methodology of pipe failure is erosion corrosion, which affects the coating inside pipes. Most of the pipes used by the City in the 1970s and 1980s have eroded to the lining and allow for corrosion. Soil testing can determine if the surrounding soil has the potential to corrode these pipes from the outside as well.

Mr. Walters asked how the consultant team and City Staff prioritize the neighborhoods in need of repair. He also asked if the City is currently in better condition than it was when the consent order began. Ms. Carney confirmed that over 10,000 ft. of pipe has already been replaced. A number of pump stations included in the consent order were required to be repaired by September 2020. Work on these stations is 99% complete and expected to be fully completed within a month.

Chief Engineer Omar Castellon advised that a map reflecting the progress of the consent order is published each week on the City's website. The projects are also updated on the

LauderShare website. Ms. Scott and Chair Mammano recommended making this series of maps available to the public through additional outreach.

Mr. Stresau asked how the force main condition assessment would identify smaller lines. Ms. Carney reiterated that there are 111 miles of pipeline in the City, ranging from 4 in. to 54 in. in diameter and constructed of various materials. The team has reviewed the break history and modified remaining useful life of these pipes, based upon when they were installed. This left approximately 42 miles of pipe of which the condition was unknown. A portion of these pipes are being analyzed to determine if replacement is necessary. She concluded that the overall project is 90% complete.

Ms. Carney continued that asset management addresses operations and maintenance of pumps, pipes, force mains, collector systems, valves, and other assets, which are analyzed to determine their remaining and/or modified useful life as well as their importance to the overall system.

Mr. Hernandez asserted that the City feels it has sufficient staff to address operations and maintenance needs, based upon current workplace demands. Work plans for the Public Works Department are reviewed by the City Manager each year to determine if additional staffing may be necessary. Mr. Hernandez advised that the City has made breakage emergencies a priority and feels there is sufficient staff in place to manage these projects as well as other needs.

Chair Mammano commented that the same number of staff members who were in place before recent breaks occurred seems to be handling the extra workload of emergent projects and challenges. She was not confident that more issues could be addressed in a timely manner with the same amount of staff. Mr. Ostrau pointed out, however, that staff should not be hired based only on emergency needs.

Mr. Zeltman asked what preventative measures the City is taking to slow the erosion of its wastewater system, such as lining basins found to allow the intrusion of sand or vacuuming sand from the system. Mr. Castellon replied that the City is taking steps to address this issue within prioritized basins in six neighborhoods; in addition, they plan to take these steps with additional basins in the future. They have also moved resources from the Department of Public Works to the Department of Sustainable Development to inspect private connections to gravity mains.

Ms. Carney continued that part of the consent order requires repairing pipes and other fixtures in the ground; another aspect requires reviewing planning documents and surveys, as well as mapping. She reviewed a map of the section already complete as well as of the next section to be addressed. Of the five pump stations due to be completed by the end of September 2020, four have already been completed and the fifth is underway.

Ms. Carney stated that inflow and infiltration (I&I), which refers to rain entering the sewer system as well as groundwater that infiltrates through underground pipes, is also being

addressed. Inflow has been tested and a number of defects identified in approximately 230,000 linear ft. Closing these defects will help reduce strain on the system. A program is also underway to rehabilitate cracked manholes. With regard to infiltration, roughly 200,000 linear ft. of sewer line and laterals need to be lined to address defects leading to infiltration.

The City has plans and programs to address gaps between the recommendations of the Environmental Protection Agency (EPA) and the state. These include both asset management and operations and maintenance plans. Several meetings have been held with affected neighborhoods to establish aspirational goals. A report on what is necessary to meet these goals is expected to be complete in March 2020. Afterward, the City will provide an implementation schedule to the state, including the number of staff members who may need to be hired to meet these goals.

Ms. Scott asked how many of the City's 111 miles of pipe have been replaced thus far. Ms. Carney advised that only 10.4 miles of pipe are subject to the consent order and will be replaced over the next two to three years. Another 42 miles of pipe will need to be assessed to determine whether or not they need repair.

Ms. Carney continued that pipe capacity has been found to be sufficient for certain rain events. It will continue to improve as repairs are made. Chair Mammano pointed out that another concern is development: the addition of more units in a given area will increase stress on the existing system. Mr. Castellon replied that capacity is overseen by a group which makes recommendations on what must be changed to accommodate development.

Mr. Zeltman asked if the City requires developers to make infrastructural improvements such as increasing the size of water mains to accommodate more units. Mr. Castellon replied that these changes are often conditions of approval. The group overseeing capacity studies connections from new development all the way to the appropriate treatment plant. Developers must calculate how much water their projects will add to the system.

Mr. Angeli expressed concern with the published cost estimate of \$1.4 billion to repair the system, which he felt did not add up. He pointed out that areas that have experienced recent breaks or are in danger of having a break should be prioritized. He also felt there are concerns that have not been addressed yet, such as leakage into the river.

Dr. Nancy Gassman, Assistant Director of Public Works (Sustainability), explained that the City established an inventory of sewer pipe to ensure they had a minimum of 40 ft. of every major size of pipe, as well as other necessary parts. There are some parts, however, such as 54 in. pipe, which cannot be kept in inventory. Staff has recommended that certain sizes of pipe in different locations be measured and parts ordered to ensure they are on hand as needed. She pointed out that the City must also secure parts made with materials that can withstand its unique environment, including salt water.

Dr. Gassman continued that in the event of a break, the City deploys a “first responder” trailer with the necessary equipment to address the problem to the site. All Staff teams are trained to respond to these issues.

Mr. Walters recalled an earlier discussion in which it was estimated the City currently operates at approximately 68% of its total capacity. He asked if this is still the case. Talal Abi-Karam, Assistant Director of Public Works (Utilities), explained that while there is sufficient capacity at the wastewater plant, there is a gap in the capacity to convey the flow from gravity systems to pump stations to the plant. This is what Public Works is attempting to fortify.

Mr. Walters asked if there would be sufficient capacity to convey the flow of water if all pipeline and pump stations were new. Mr. Abi-Karam advised that this is communicated whenever Public Works issues a capacity letter for development. Based on modeling and calculation, they determine how much a given development will affect the system.

Chair Mammano stated that at the next Committee meeting, she would like to see a capacity letter for one of the major developments coming into Downtown Fort Lauderdale, including an analysis of how this determination is made and how water is conveyed from the development to the treatment plant. She also requested a presentation on the cumulative effects of development in a given area, explaining that this issue has been raised at nearly every Committee meeting.

Mr. Marshall advised that concurrency is a requirement of state law: no local government may issue a building permit without first demonstrating concurrency for sanitary sewer, potable water, drainage, and in some cases transportation. This shows that a development has adequate capacity. He reiterated that this is included in all staff reports and is typically a condition of building permit approval. He added that single-family districts contribute significantly more volume to sewer capacity than multi-family districts. Mr. Zeltman noted that if there is not sufficient capacity at a water treatment plant to treat wastewater, a moratorium is invoked by health regulatory agencies.

Ms. Carney reviewed a map of the City’s force mains, stating that the project will also include placement of redundant lines at key locations. She also reviewed a graphic showing existing and redundant lines affected by the consent order, noting that a portion of redundant line was already included in the CIP. The total cost for construction of the redundant line is approximately \$58 million, with the City to contribute another \$6.8 million from its fund balance. Another \$3.5 million will be needed to place a currently exposed line underground.

Mr. Walters asked from where the additional funds might be identified. Aniesha Daniel, Deputy Director of Public Works, explained that these dollars would come from the fund balance and would not affect any other projects. There is little federal funding assistance available for water and sewer projects, as they are typically funded by user fees. The state provides low-interest loans to utilities that need to borrow money; however, because

the City has a strong borrowing capacity, they have rarely used this funding mechanism in the past.

B. Recent Sewer Line Breaks – City Staff

Ms. Daniel referred the Committee members to a Conference Agenda Memo (CAM) prepared by Staff, which outlines recent breaks throughout the City and the responses to them. She noted that a 54 in. force main break in the Rio Vista neighborhood affected Hector Park and adjacent properties with sewage flow. An emergency bypass was placed on the line, which allowed the main to be shut off within a few days. The response was delayed due to unavailability of parts, which had to be fabricated. Tankers were deployed throughout the community to pump out sewage and minimize the effect on homes in the area.

Chair Mammano emphasized the importance of posting water quality figures online, which allowed the public to see these numbers improve in real time as repairs were made.

Ms. Daniel continued that after the bypass was complete and the City returned to the 54 in. force main, another break occurred in the same area. She explained that the City's incident command structure allowed them to serve residents effectively, with incident commanders, inspectors, and project managers on hand each day. The Public Information Office (PIO) also issued daily updates, and three calls per day were orchestrated between responding entities, including Public Works, the City Manager's Office, and the Police and Fire Departments.

Another break occurred in a 16 in. force main in the Victoria Park neighborhood, which was dealt with immediately by redirecting flow to a pump station. This minimized the impact on neighbors. A break occurred in a clamp at the Himmarshee Canal, which required multiple attempts to place a new clamp. Another break in the Coral Ridge neighborhood was addressed quickly by Staff. There were a total of six breaks in the past month. Sites have been cleaned and disinfected, and sod and other repairs have been made wherever necessary. Ms. Daniel concluded that Staff has moved very quickly to meet all the needs of affected areas. Signage was posted in the affected canals to ensure public awareness of the situation.

Mr. Zeltman asked if pollution movement in canals was contained. Dr. Gassman explained it was not possible to deploy effective turbidity barriers underwater in the Tarpon River due to the level of flow. The Committee acknowledged the efforts made by Public Works and other Staff to address these emergencies during the recent holidays. The cost of repairs will be presented in a February 2020 CAM.

Mr. Stresau asked if the Parks and Recreation Department would use any of its parks bond money toward these repairs. Mr. Hernandez replied that the parks must be restored to their condition prior to the incidents. It is possible that there may be opportunities to further enhance these facilities beyond their original condition using parks bond dollars.

Chief Procurement Officer Jodi Hart advised that in some emergency situations, the Procurement Department has the option of selecting a known qualified vendor without going through the bid process; however, they did not use this option during the recent emergencies in an attempt to keep costs as low as possible. They engaged with multiple qualified vendors to create a competitive environment, then used this process to award to more than one vendor. Projects are addressed concurrently using different contractors, which will help speed the process. An outreach component is built into these contracts to ensure contractors communicate with neighbors regarding the projects.

Environmental Services Manager Todd Hiteshew stated that the City has a regulatory responsibility to report any sanitary sewer overflow or discharges to agencies such as DEP and Broward County. Both entities were immediately notified of the breakages and are actively engaged in the process. The City provides them with two daily internal updates in addition to the regular updates from PIO. DEP and Broward County have also conducted site visits in the Rio Vista neighborhood. The City will file required reports with the appropriate agencies by January 10, 2020.

Mr. Hiteshew continued that the City deployed emergency procedures into the waterways to help them recover quickly. This includes testing for bacteriological contamination that may come from human waste. This testing was done for consecutive days and resulted in shrinkage of the advisory area as the contamination fell within the standard. Once contamination meets the acceptable standard, the City no longer aerates or cleans the water in response to the event.

Mr. Hiteshew advised that the City is fined for sewer contamination according to criteria that will be defined in another consent order. He reviewed the estimated levels of contamination recorded in the areas of the breakages:

- Rio Vista/Hector Park: estimated discharge volume of 35.4 million gallons
- Rio Vista/Virginia Young Park: 77.57 million gallons
- Himmarshee Canal: 13.7 million gallons
- Victoria Park: 154,600 gallons (December 27, 2019 discharge); 44,620 gallons (December 30, 2019 discharge)
- Coral Ridge Country Club Estates: 8075 gallons
- Manhole overflows: 37,950 gallons
- Gravity discharge: 100 gallons
- Total discharge: 126,877,295 million gallons

Mr. Hiteshew clarified that these figures include all discharged materials, including the amounts which were recaptured.

Mr. Hernandez stated that the City did everything possible to contain as much of the spill as possible to minimize its effects on private property as well as the amount of water that went into the waterways. Fines will be defined by the consent order that will be issued in relation to these spills.

Mr. Ostrau asked if “No Swimming” orders on beaches were related to the contamination. Mr. Hiteshew replied that the Florida Department of Health (DOH) directed the placement of these signs on beaches. He estimated that this was most likely due to heavy rainfall within a short period of time rather than the breakages. Air quality testing was also conducted and revealed no adverse issues.

The following Item was taken out of order on the Agenda.

8. Public Comments

Boyd Corbin, member of the public, requested information regarding a second spill into the Himmarshee Canal which occurred on January 2, 2020. Mr. Hiteshew advised that the total he had provided earlier included this spill, which was estimated at 769,533 gallons.

Dane Hancock, member of the public, advised that in 1972 Broward County installed 12,000 ft. of 54 in. pipe beneath the Intracoastal Waterway and offshore for discharge from a water treatment plant. He asked several questions, including:

- The reason for the recent failure, such as pipe material or subsoil conditions
- Type of pipe installed
- Consideration of rigid or non-rigid pipe for new lines
- Type of internal/external coatings on original pipe
- Bonding of original pipe for straight current protection
- Working velocity inside pipe
- Internal pressure on pipe to plumbing stations

Mr. Castellon explained that rigid pipe is being considered in some areas, depending upon the type of soil and conditions. He added that use of non-rigid pipe did not contribute to the failure of lines. The original pipe was bare rather than coated, which did not contribute to exterior failures. He was not aware of whether or not the original pipe was bonded. Ms. Carney added that velocity inside the pipe is dependent upon conditions and is between 2.5 ft. and 7 to 8 ft. per second, although it may be faster during peak events.

Mr. Ostrau suggested that Mr. Hancock submit his remaining questions or concerns in writing. Mr. Hancock provided his list of concerns to Chair Mammano. He also expressed concern with the lining of pipes, particularly in relation to the structural integrity of the original pipe.

Mr. Corbin stated that if the Committee continues or is reestablished after its sunset date, he felt they should focus on water, sewer, and stormwater issues. He also felt their makeup should include engineers who understand these systems. He asked how much is spent each year to repair or sleeve pipes, as well as how much chloramine is in the City’s drinking water.

Mr. Corbin continued that he has read the Carollo report, and asserted that the current filter media and aerators should have been changed to a different system, and that the line feeding system is inconsistent, which leads to variations in water quality. He concluded that the Committee should address these and other issues noted in the Carollo report before a new water treatment plant is constructed.

Steve Weber, member of the public, asked if the City regularly inspects pump impellers. He also asked if the City has spare parts for these devices and requested clarification of the type of impellers used. Mr. Abi-Karam replied that the City inspects its impellers and replaces them as needed. Since 2017, the City has rehabilitated a number of its pump stations, as a hurricane that year was classified as a 100-year storm. Pumps in maintenance facilities are replaced when they fail.

Mr. Corbin asked for the capacity of the George T. Lowmeyer Wastewater Treatment Plant. Mr. Abi-Karam stated that its capacity is 56.6 million gallons per day based on the maximum three months' average daily flow.

Rise Gottesmanh, member of the public, requested clarification of how a determination is made on the capacity required of new development, including whether or not this considers the number, age, and/or condition of pipes. Chair Mammano stated that this would be discussed in greater detail at the next Committee meeting. Mr. Castellon added that age and diameter of pipes are considered. If there is a need for replacement, this is included in the capacity letter.

C. Carollo Presentation

Lyle Munce of Carollo Engineers, project manager for the plan evaluation of the Fiveash Water Treatment Plant, showed a PowerPoint presentation on the evaluation report. The project scope includes three elements:

- Existing facility condition assessment
- Existing water source evaluation
- Treatment system investigation

Carollo deployed a team of engineers to perform a structural, electrical, and mechanical evaluation of the facility, followed by a visual inspection. They concluded that the facility has reached or exceeded its projected useful life in terms of both structure and most equipment. These findings are consistent with the findings of the 2017 Comprehensive Utility Strategic Master Plan. Carollo does not recommend significant investment in this facility for long-term use.

Carollo also assessed the need for a planning period for water source evaluation, which was defined as extending through the year 2035. Once they identified how much water was needed, they compared this to the South Florida Water Management District water use permit allocations already issued to the City. They performed a comparison of additional water from the C-51 Reservoir to the deeper and more saline water from the

Floridan Aquifer. For the planning period, the allocations of the existing water use permit are sufficient. If additional water is needed after this time, the C-51 Reservoir was determined to be more cost-effective than procuring and treating water from the Floridan Aquifer.

Chair Mammano requested additional information on the City's request for a permit to secure additional water from the C-51 Reservoir. Mr. Hernandez replied that the South Florida Water Management District is aware of the request and discussions are ongoing. The City has not yet committed to an agreement. As the cost of additional water was not included in the current budget, it may be taken out of the fund balance this year and considered as a budget item for the next year. Due to funding constraints, approximately \$3 million could be taken from the fund balance to purchase additional capacity. The City Commission is aware of the need to move forward with the C-51 allocation.

Mr. Munce continued that the treatment systems investigation was a four-part effort in which the Carollo team investigated 18 treatment schemes for the treatment of water to meet the City's goals. They also assessed the ability to locate a replacement facility at the Fiveash Plant site and evaluated the possibility of locating a replacement facility at the City-owned Prospect Wellfield site. The City's primary goals included:

- Meeting all regulatory requirements
- Providing enhanced water quality in terms of aesthetics
- Establishing a state-of-the-art treatment system for 30 to 50+ years
- Optimizing fiscal and operational considerations
- Planning for potential future water quality regulations

Carollo came to the conclusion that there are multiple treatment schemes that could meet water quality and infrastructure goals. The Prospect Wellfield site was determined to be the most suitable site for a replacement plant. The most state-of-the-art treatment system would include processes such as nanofiltration and ion exchange at a conceptual cost between \$350 million to over \$400 million.

Mr. Zeltman commented that it could be less expensive to build a new facility at the Fiveash site using existing structures. This is due to both security considerations and the existence of piping, although he noted that the transmission mains from that site would present a challenge. He also expressed concern with the likelihood of service disruption. Mr. Munce explained that these contingencies were considered as part of the report. He agreed that the central distribution location must be at the Fiveash facility; however, a new facility at the Prospect Wellfield site would repurpose two raw water mains into finished water lines.

Mr. Munce continued that the site building plans would be very constrained. The existing Fiveash plant must be maintained until the new facility is built. It also contains an administration building, vehicles for staging, and fuel storage, which could make it difficult to construct a new plant there. Due to these and other considerations, Carollo determined

that it could be more expensive to build a new facility on the Fiveash site than on the Prospect Wellfield site.

Mr. Hernandez advised that a link to the Carollo report is available on the Public Works section of the City's web page, below the Utilities and Master Plan tabs.

Mr. Munce estimated that it would take up to two years to design and three years to construct a new water treatment plant. There is no money budgeted in the current CIP for a new facility, although funds are included for upgrades to the existing plant. Mr. Hernandez advised that it is too early at this time to review the proposed project from a funding perspective, although he acknowledged that public-private partnerships (P3s) are being considered as an option. Mr. Munce added that Carollo has offered to provide the City with an informational workshop on different procurement and/or funding methods. Chair Mammano recalled that this type of workshop was also a recommendation of the Committee.

7. Informational Items

None.

9. Adjournment – Next Regular Meeting Monday, February 3, 2020

There being no further business to come before the Committee at this time, the meeting was adjourned at 4:45 p.m.

Any written public comments made 48 hours prior to the meeting regarding items discussed during the proceedings have been attached hereto.

[Minutes prepared by K. McGuire, Prototype, Inc.]